

ANNOTATED CATALOGUE OF A COLLECTION OF BIRDS
MADE BY MR. COPLEY AMORY, JR., IN NORTHEAST-
ERN SIBERIA.

By J. H. RILEY,

Aid, Division of Birds, United States National Museum.

Mr. Copley Amory, jr., accompanied the Koren Expedition to the Kolyma River region of northeastern Siberia in 1914, where the 228 specimens of birds and few sets of eggs listed in the following report were collected, and generously presented to the United States National Museum.¹

While the collection contains no novelties, it included a number of forms previously unrepresented in the museum, and the series of hazel grouse from the Kolyma has enabled me to describe a new form from further south.²

A brief sketch of Mr. Amory's route has already been published³ and Mr. B. Alexander, who accompanied the expedition, collecting fossils for the Smithsonian Institution, has published in the same number (pp. 31-40) an account of the country along the lower Kolyma and the Little and Big Annuj rivers, tributaries of the Kolyma. Mr. Amory, besides collecting on the two Annuj rivers, the lower Kolyma, and the coast, collected further up the Kolyma in the wooded area at Verkhni and in the foot hills of the Tomus Chaja mountains to the west of Verkhni.

Mr. Koren had previously made a trip to the same region, the birds of which have been reported upon by Thayer and Bangs,⁴ who

¹ On his way north along the Alaskan coast Mr. Amory collected examples of the following species:

Puffinus tenuirostris (Temminck). (Bristol Bay.)
Larus brachyrhynchus Richardson. (Kodiak Island.)
Heteractitis incanus (Gmelin). (Kodiak Island.)
Histrionicus histrionicus pacificus Brooks. (Kodiak Island.)
Passerculus sandwichensis sandwichensis (Gmelin). (King's Cove.)
Melospiza melodia insignis Baird. (Kodiak Island.)
Corvus caurinus Baird. (Kodiak Island.)

Pica pica hudsonica Sabine. (Kodiak Island.)

² Proc. Biol. Soc. Wash., vol. 29, 1916, p. 17.

³ Smiths. Misc. Coll., vol. 66, No. 3, 1916, pp. 46-51.

⁴ Proc. New England Zool. Club, vol. 5, April, 1914, pp. 1-48, with an outline map of the region.

have described most of the novelties not previously named by Buturlin. The latter spent some time near the mouth of the Kolyma and made large collections there but has published no connected account of his work, to my knowledge, though in his paper on the Rosy Gull¹ a good description of the country is given and many species of birds are mentioned.

Thayer and Bangs's list is so well done that little can be added to what they have already said, but as Mr. Amory seems to have reached a higher point on the Kolyma than Koren did on his previous trip, he naturally secured a number of forms not obtained by the latter, and it has been thought advisable to publish this list, with the field notes of the collector, as a supplementary contribution to the ornithology of a little-known region.

For convenience of comparison the species are listed in the order followed by Thayer and Bangs.

The author is indebted to the authorities of the Museum of Comparative Zoology for the loan of a series of *Phylloscopus trochilus evermanni* for comparison.

Family TETRAONIDAE.

1. LAGOPUS LAGOPUS KORENI Thayer and Bangs.²

Seventeen specimens from the following localities: Annuj River, September 12, 18, and 23, 1914; Little Annuj River, September 23, November 9, and 26, 1914; Nijni Kolymsk, January 20, February 11, and June 12, 1915; Verkhni Kolymsk, April 12, 17 and 20, 1915; 7 miles north of Nijni Kolymsk, May 19, 1915; 30 and 33 miles west of Verkhni Kolymsk, May 23, 1915; Kolyma Delta, July 11, 1915.

This series bears out the characters ascribed to it by the describers, and to their account I can add nothing. In measurements it comes very close to *Lagopus l. ungavus* as the following table will show:

Locality.	Wing.	Tail.	Culmen.	Depth of bill.
	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>
Six males from the Kolyma.....	260	128.2	20.6	13
Ten males from Ungava.....	197	121.9	20.9	13.5
Five males, west side of Hudson Bay.....	200.6	126.7	19.1	11.8
Six males, northern Alaska.....	196.8	119.9	18.9	12.8
Five females, Kolyma.....	195.6	125.8	17.8	11.3
Ten females, Ungava.....	179	110	19.3	12.9
Three females, west side of Hudson Bay.....	191.2	116.7	18.3	10.8

Winter resident throughout the Kolyma Valley.—C. A.

¹ Ibis, 1906, pp. 131-139, 333-337, 400, 661-666.

² Proc. New England Zool. Club, vol. 5, Apr. 9, 1914, p. 4.

2. LAGOPUS RUPESTRIS, subspecies?

Three males and one female, 67 miles west of Verkhni Kolymsk, May 6, 8, 14, and 19, 1915; one male and one female, 60 miles west of Verkhni Kolymsk, May 20, 1915.

All of these are in the white winter plumage and only in two males and one female are there any feathers of the summer plumage appearing; in the case of the males (taken May 19 and 20) only a few feathers on the top of the head, but in the female (May 20) there are numerous feathers on the back, head, wing-coverts, and upper breast, mostly concealed by the white feathers, however.

After comparing these with a series from Alaska I can find no differences in size; they are not in the right stage of plumage to show whether there is any difference in color, so for the present the Kolyma form will have to remain in doubt.

In the Tomus Chaja Mountains; winter resident.—C. A.

3. TETRAO PARVIROSTRIS PARVIROSTRIS Bonaparte.

The head of a male, Verkhni Kolymsk, April 13, 1915, and a female, Verkhni Kolymsk, April, 1915.

We saw one in September on the Lesser Annuj, 50 versts [33 miles] east of the Kolyma, where the larch increases in size and quantity; and another in the same locality in October. None around Nijni Kolymsk and they are not common anywhere in the lower valley. They are common in the upper valley and are used for food by the Yakuts. In April in the foothills of the Tomus Chaja Mountains one morning a boy killed three males with his rifle. During a three weeks' visit to the priest at Verkhni Kolymsk several were brought in to him by the natives.—C. A.

4. TETRASTES BONASIA KOLYMENSIS Buturlin.¹

Four males, Verkhni Kolymsk, April 12 and 20, 1915; two males and one female, 67 miles west of Verkhni Volymsk, May 8 and 17, 1915.

This series is very uniform and quite different from any of the forms with which I have been able to compare it. The form I named *Tetrastes bonasia amurensis*² approaches it in certain particulars, but is quite distinct, and as the differences have already been pointed out in the description they need not be repeated here. Since I published the above description Mr. S. A. Buturlin has published a paper quoted in the footnotes, revising the birds of this genus. In this revision he renames the bird I described from Manchuria, but fortunately gave it the same name. He also names the bird from Ussuriland, calling it *Tetrastes bonasia ussuriensis*.³ Seebohm's description⁴ of *Tetrao septentrionalis* is very unsatisfactory. He does

¹ Messenger Ornith., vol. 7, No. 4, 1916, p. 226.

² Proc. Biol. Soc. Wash., vol. 29, 1916, p. 17.

³ Messenger Ornith., vol. 7, No. 4, 1916, pp. 222 and 227.

⁴ Ibis, 1884, p. 430.

not give any definite locality, but Buturlin¹ seems to restrict Seebohm's form to the "middle course of the Yenisei, from Krasnoyarsk to the confines of the forest and westward to the Government of Tobolsk and southeast to the Government of Sokutsk." Seebohm's type should be in the British Museum, but until some competent ornithologist examines it and fixes the name there is nothing to do but accept Buturlin's disposition of it. Fortunately the United States National Museum possesses a female from the Yenisei of Seebohm's own collecting. This is the bird I referred to² as probably representing a new form when I was under the impression that the Manchurian bird was true *T. b. septentrionalis*.

The Yenisei specimen when compared with *T. b. kolymensis* is not so gray above and the white markings on the wings and the white bars on the feathers below are more restricted; the dark bars to the feathers on the underpart of *T. b. kolymensis* are also darker and heavier. The United States National Museum has recently acquired two specimens of *Tetrastes* from Sakhalin Island. They agree with a specimen from the mouth of the Amur River (near Nikolaievsk). This Amur specimen is slightly grayer above than the two males from I-mien-po, Manchuria (the type and cotype of my *T. b. amurensis*), but not different enough in my opinion to warrant a separate designation. From the above I would also place the *T. b. ussuriensis* Buturlin in the synonymy of *T. b. amuricensis*, as it hardly seems probable that two forms can inhabit practically the same country. Nearly all species of grouse have two phases of plumage, a red and a gray; but they are not distinct forms in the general acceptance of the term, as Buturlin seems to imply, but variations. In some parts of a species' range one of the phases may be lacking. This seems to be the case with *T. b. kolymensis*, as there are no birds of the red phase in the series before me.

Does not occur below Sredne Kolymsk, but not common until Verkhni is reached. Saw them constantly there in April and May, near the Kolyma and in the foothills of the Tomus Chaja Mountains before leaving the timber. Winter resident south of Sredne Kolymsk.—C. A.

Family GAVIIDAE.

5. GAVIA ADAMSI (Gray).

One female, Cape Bolshaja Baranov, July 19, 1915; and one without data from the Kolyma Delta region.

6. GAVIA STELLATA (Pontoppidan).

One male, Kolyma delta, July 16, 1915.

¹ Messenger Ornith., vol. 7, No. 4, 1916, p. 226.

² Proc. Biol. Soc. Wash., vol. 28, 1915, p. 162.

Family PROCELLARIIDAE.

7. FULMARUS ROGERSI Cassin.

Two males, off Indian Point, August 8, 1914.

These two specimens are very dark on the back, in fact darker than any specimens of the light phase of *Fulmarus g. glupischa* with which I have been able to compare them, but in measurements they are nearer *Fulmarus rogersi*, which averages larger with a heavier bill. The type of *F. rogersi* is a light-colored bird, in fact aberrant. It is pure white, the interseapular region and scapulars with a pale neutral gray wash; wing-coverts with a few pale neutral gray spots; bend of the wing, border, and primary-coverts, mouse gray; primaries and outer secondaries chaetura drab, with inner portion of the inner web white; tail feathers mouse gray, white on the inner web, except on the central pair. It is unsexed and measures: wing, 314; tail, 120; culmen, 38.5; depth of bill at base, 19.5.

For comparison I append the following averages:

Locality.	Wing.	Tail.	Culmen.	Depth of bill at base.
	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>
Four males of <i>F. rogersi</i>	323.5	126.6	38.5	19.4
Two males, off Indian Point.....	321	123.7	39	19.5
Four males of <i>F. g. glupischa</i>	313	124.6	37.7	17.6

Family ALCIDAE.

8. FRATERCULA COENICULATA (Naumann).

One male, Emma Harbor, July 28, 1914.

9. AETHIA CRISTATELLA (Pallas).

One male, Emma Harbor, July 29, 1914.

10. AETHIA PUSILLA (Pallas).

One male, off Indian Point, August 8, 1914.

11. CEPPHUS MANDTII (Mandt).

One male, Cape Bolshaja Baranov, August 9, 1915.

12. CEPPHUS COLUMBA Pallas.

Four males and two females, Emma Harbor, July 22, 28, 29, August 5 and 8, 1914.

Very common, Emma Harbor.—C. A.

Family LARIDAE.

13. LARUS VEGAE Palmén.

One male and one female, Emma Harbor, August 4 and 5, 1914; one female, Ajan Island, August 17, 1914.

14. RHODOSTETHIA ROSEA (Macgillivray).

On August 20, 1914, Capt. Koren saw four young Ross' gulls as we passed north of Ajan Island.—C. A.

15. STERNA PARADISAEA Brünnich.

Two males, Ajan Island, August 17, 1914; one female, Nijni Kolymsk, June 18, 1915.

Family STERCORARIIDAE.

16. STERCORARIUS POMARINUS (Temminck).

One male, Cape Bolshaja Baranov, August 1, 1915.

17. STERCORARIUS PARASITICUS (Linnaeus).

Two males, Kolyma Delta, July 12 and 15, 1915.

Family PHALAROPODIDAE.

18. PHALAROPUS FULICARIUS (Linnaeus).

Two males, Kolyma Delta, July 7, 1915; one female, Cape Wan-karem, August 12, 1914; one male, Cape Bolshaja Baranov, August 11, 1915; one male (?), three females, and one unsexed, mouth of the Baranika River, August 16, 1915.

The two males taken July 7, have begun to turn white down the center of the breast, and a small white spot is appearing on the throat; the male taken August 11 has the lower parts particolored red and white, the latter prevailing, and the dusky of the chin has almost entirely disappeared; all the other specimens are white below with a band of light brownish drab across the foreneck. None of the specimens, except one male, taken August 11 show any great change above from the breeding plumage; the foreheads have become white and a few of the feathers of the winter plumage have begun to appear along the scapular region. The male collected August 11, has more of the gray of the winter plumage appearing on the back than any other specimen in the series.

19. LOBIPES LOBATUS (Linnaeus).

Two males, Kolyma Delta, July 7, 1915; one male, Sucharin, Kolyma Delta, July 9, 1915; and one unsexed, Baranika River, August 16, 1915.

Mr. Amory obtained a set of four eggs nearly hatched from a low, flat, bare island at the mouth of the Kolyma, July 16, 1915. The nest was situated on a tuft of wet moss among swampy "nigger-heads."

Family SCOLOPACIDAE.

20. GALLINAGO GALLINAGO RADDEI (Butarlin).

One male, 7 miles north of Nijni Kolymsk, June 1, 1915; one male and one unsexed, Nijni Kolymsk, June 24, 1915.

The three specimens listed above are lighter, both above and below than in a series of five specimens from western Europe. The axillaries, though, are as heavily barred as in any European bird in the series, so this can not be a very reliable character. As there seems to be some doubt of the applicability of Hodgson's name *Gallinago unicolor* as given by Thayer and Bangs,¹ it is probably better to use Buturlin's name.²

There seems to be little or no difference in size between European and east-asiatic birds, as the following will show :

Locality.	Wing.	Tail.	Culmen.
	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>
Four males from Europe.....	129	58.2	65.9
Ten males from eastern Asia.....	127.4	57.6	69.5
Three females from Europe.....	128	57.7	70.3
Eight females from eastern Asia.....	127.9	56.3	65.9

21. PISOBIA ACUMINATA (Horsfield).

Two females, Sucharin Island, Kolyma Delta, July 9, 1915; one female, Kolyma Delta, July 14, 1915.

22. PISOBIA MACULATA (Vieillot).

One female, immature, Koliutschin Bay, August 10, 1914.

23. PISOBIA RUFICOLLIS (Pallas).

One male and one female, Emma Harbor, August 4, 1914.

24. PISOBIA TEMMINCKII (Leisler).

One female, Nijni Kolymsk, June 22, 1915.

25. ARQUATELLA COUESI Ridgway.

One immature female, Koliutschin Bay, August 10, 1914.

26. CANUS CANUS ROGERSI Matthews.³

One immature female, Chaun Bay, August 17, 1914.

Mathews, in his great work cited below, has divided the knots into three races—an European, an Asiatic, and an American. The series at my command seems to confirm this arrangement, except that birds from Alaska seem to belong to the Asiatic form. Birds from the eastern United States seem to be paler above, with more rufous and less black, when compared with European specimens. Asiatic birds are, as Mathews says, somewhat intermediate, darker than American specimens, but not so dark as those from Europe. With the Asiatic race I would include the Alaskan specimens as above stated, since they seem to be identical.

¹ Proc. New England Zool. Club, vol. 5, Apr. 9, 1914, p. 14.

² *Scelopax (Gallinago) gallinago raddei* Buturlin, "Limicolae of the Russian Empire." Pt. I, Tula, 1902, p. 54.

³ Birds, Australia, vol. 3, pt. 3, Aug. 18, 1913, p. 270.

There is an adult male specimen in the United States National Museum collection (No. 109097) taken at Fort Simpson, Mackenzie, May 13, that seems also to agree with Alaskan and Asiatic birds; in point of size it is the largest male example measured. It must be confessed that the eastern United States specimens are in fresh unworn plumage; while the Alaskan, Asiatic, and European birds mostly have the gray edges of the back feathers abraded, but there are three unsexed individuals from Greenland before me that are about in the same stage of abrasion as the series from the three latter localities. These Greenland birds have less black and more rufous on the back than in either the European or Asiatic-Alaskan series, and the rufous below is especially dark and extensive, particularly so in No. 18628. The shade and extent of the rufous below varies considerably in the same series and I do not attach much importance to this character. My series of fall plumages of both the American and Asiatic forms are much too small to show anything. The differences in size between the series are small and covered by the variations; American birds average slightly smaller than the other two races. Besides an extensive series of spring birds from eastern United States there are a few unsexed specimens from the old world, not given in the measurements below, though useful for comparison. The various series average as follows:

Locality.	Wing.	Tail.	Culmen.	Tarsus.	Middle toe.
	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>
Ten males from eastern United States.....	163.4	60.7	35.3	39.7	21.1
Four males from Alaska.....	166.2	63.9	34.5	31.7	21.2
One male from Mackenzie.....	177	64	36.5	34.5	22.5
Two males from Asia.....	166.2	62.5	33	31	20.5
One male from France.....	166.5	65	36	31	21
Ten females from eastern United States.....	167.8	62.1	37.1	31.6	21.6
One female from Alaska.....	169.5	63.5	39	32.5	21.5
Four females from Europe.....	168.6	62.9	36.1	31.5	21.3

27. *LIMOSA LAPPONICA* BAUERI Naumann.

One male, Cape Bolshaja Baranov, August 9, 1915.

28. *RHYACOPHILUS GLAREOLA* (Linnaeus).

One male and three females, Nijni Kolymsk, May 27, June 16, 17, and 27, 1915; one male, 7 miles north of Nijni Kolymsk, June 1, 1915.

29. *TOTANUS ERYTHROPUS* (Pallas).

One immature female, Little Annuj River, September 9, 1914.

Thayer and Bangs¹ when they found it impossible to accept *Tringa erythropus* Scopoli² for this bird, evidently overlooked the older name of *Scolpax erythropus* Pallas.³

¹ Proc. New England Zool. Club, vol. 5, 1914, p. 20.

² Annus 1, Hist. Nat., 1769, p. 102.

³ Vroeg's Cat., Adumbr., 1764, p. 6.

30. *TEREKIA CINEREA* (Güldenstädt).

Two males, 7 miles north of Nijni Kolmsk, June 2 and 9, 1915; one female, Nijni Kolymensk, June 22, 1915.

These three specimens measure as follows:

U.S.N.M. No.	Sex.	Date.	Wing.	Tail.	Culmen.
			<i>mm.</i>	<i>mm.</i>	<i>mm.</i>
237348.....	Male.....	June 9	132.5	51	44
237347.....	do.....	June 2	130.5	54.5	45
237349.....	Female.....	June 22	139.5	56	50

31. *MACHETES PUGNAX* (Linnaeus).

Two males, 7 miles north of Nijni Kolymensk, May 26 and 30, 1915; one female, 8 miles west of Verkhni Kolymensk, May 24, 1915; five females, Sucharin Island, Kolyma Delta, July 7 and 9, 1915.

Family CHARADRIIDAE.

32. *PLUVIALIS DOMINICUS FULVUS* (Gmelin).

One female, Nijni Kolymensk, September 1, 1914.

33. *CHARADRIUS MONGOLUS* (Pallas).

One female, Emma Harbor, July 22, 1914.

34. *MORINELLA INTERPRES INTERPRES* (Linnaeus).

Three immature specimens, Cape Wankarem, August 12, 1914.

Family ANATIDAE.

35. *MERGUS SERRATOR* Linnaeus.

One immature, not sexed, Kolyma River, September 12, 1914.

36. *MARECA PENELOPE* (Linnaeus).

One male and one female, 7 miles north of Nijni Kolymensk, June 3, 1915; one immature male, Annuj River, September 5, 1914.

37. *NETTION CRECCA* (Linnaeus).

One male and one female, 7 miles north of Nijni Kolymensk, June 3, 1915.

38. *NETTION FORMOSUM* (Georgi).

One male, Nijni Kolymensk, June 10, 1915; two males and one female, 7 miles north of Nijni Kolymensk, May 27 and 31, and June 3, 1915; and one female, Kolyma Delta, July 7, 1915.

Mr. Amory secured a set of seven eggs, with incubation advanced five or six days, on Sucharin Islands, Kolyma Delta, July 9, 1915. The nest was on a "niggerhead" in open swamp, a hundred yards

from a pond. It is composed of willow leaves, broken grass, and trash gathered apparently on the spot and the sides are lined with blackish down and a few feathers. The egg cavity is four inches in diameter and about the two and a half inches deep. The eggs are pale olive-buff and measure as follows: 47.6 by 35.3, 47.7 by 35, 47.4 by 33.8, 46.2 by 34.8, 47.4 by 35.7, 46.4 by 35, 47.3 by 34.4 mm.

39. *DAFILA ACUTA ACUTA* (Linnaeus).

One male, 7 miles north of Nijni Kolymsk, May 25, 1915.

40. *CLANGULA CLANGULA CLANGULA* (Linnaeus).

One specimen, Annuj River, October 4, 1914.

41. *HARELDA HYEMALIS* (Linnaeus).

Four males, Cape Bolshaja Baranov, July 22 and 23, 1915; one female, Kolyma Delta, July 14, 1915.

Three of the males have lost the long central tail feathers, and the remainder of the tail is much worn, and in all four the scapulars are mostly molted, and the fulvous of the upper back is much faded and worn.

We saw this back in September (1914) on the Lesser Annuj River. This year (1915) we saw great quantities of them at the delta of the Kolyma and along the Chorchee coast. They were by far the commonest duck observed.—C. A.

42. *POLYSTICTA STELLERI* (Pallas).

One male, Emma Harbor, August 8, 1914, and four females, near Cape North, August 13, 1914.

The male is commencing to assume the adult plumage. The forehead and sides of the face are becoming dusky white, and there is considerable white appearing in the scapulars.

Large flocks about the boat near Cape North.—C. A.

43. *ERIONETTA SPECTABILIS* (Linnaeus).

Two females, Ajan Island, August 18, 1914; and one female, near Karpe River, August 13, 1914.

Large flocks seen from the boat not far from shore, near Karpe River. During the trip in and trip out we observed no eiders of any kind west of Ajan Island.—C. A.

44. *SOMATERIA V-NIGRA* Gray.

One male in "eclipse plumage," Emma Harbor, July 7, 1914; one young male, near Karpe River, August 13, 1914, the latter is in the down and with the feathers of the first plumage appearing on the flanks and posterior scapulars; one downy young, not long from the nest, Plover Bay, August 8, 1914.

Very common at Emma Harbor.—C. A.

45. ANSER ERYTHROPUS (Linnaeus).

One female, Verkhni Kolymusk, May 26, 1915. It measures—wing, 406; tail, 114; culmen, 36.

46. MELANONYX SEGETUM SERRIROSTRIS (Swinhoe).

One male, Annuj River, September 6, 1914; one male, Kolyma Delta, July 18, 1915.

Family PHALACROCORACIDAE.

47. PHALACROCORAX PELAGICUS PELAGICUS Pallas.

One female (?), Emma Harbor, July 22, 1914.

Very common at Emma Harbor.—C. A.

Family STRIGIDAE.

48. ASIO FLAMMEUS FLAMMEUS (Pontoppidan).

One male, Little Annuj River, September 7, 1914; one unsexed, 7 miles north of Nijni Kolymusk, no date.

49. SCOTIAPTEX NEBULOSA BARBATA (Pallas).

One male, Verkhni Kolymusk, April 26, 1915.

This specimen is grayer on the back, the face is whiter, and the mark above the eye is darker and better defined than in any European specimen with which I have been able to compare it but it must be admitted my series of the latter is small, consisting of three specimens only. It measures—wing, 430; tail, 305; culmen, 23.5.

Very common just north of Sredne Kolymusk; not seen or heard around Nijni Kolymusk.—C. A.

50. NYCTEA NYCTEA (Linnaeus).

One adult female, Kolyma River, October 11, 1914. It measures—wing, 441; tail, 255; culmen from cere, 28.

51. SURNIA ULULA PALLASI Buturlin.

One female, Nijni Kolymusk, January 25, 1915; one female, Verkhni Kolymusk, April 22, 1915; one female and three males, 67 miles west of Verkhni Kolymusk, May 10, 12, and 16, 1915.

Specimens of this series, when compared with a male, a female, and an unsexed specimen of *S. u. ulula* from Europe, present a quite different appearance on the upper surface; *S. u. pallasi* seems to have more white; the nape patch, the patch over the shoulder, and the ear coverts and mark on the sides of face are darker and more pronounced; and the brown is of a different shade nearer hair brown, while in *S. u. ulula* it is olive. Below there does not seem to be much difference. There is a specimen in the collection from Petropaulski, Kamtschatka (No. 41010) that does not seem to differ

from European specimens and it may be that the differences in the color of the back pointed out for *S. u. pallasi* are due to the fresher condition of the specimens.

The series measures as follows:

U.S.N.M. No.	Sex.	Locality.	Wing.	Tail.	Culmen from cere.
			<i>mm.</i>	<i>mm.</i>	<i>mm.</i>
237393	Male....	67 miles west of Verkhni.....	240	190	17
237394	...do....	.....do.....	223	185	18
237395	...do....	.....do.....	239.5	172.5	18
237392	Female..	.....do.....	235	180	18
237391	...do....	Verkhni Kolymsk.....	230	170	16.5
237390	...do....	Nijni Kolymsk.....	240	187.5	18
109868	Male....	Archangel, Russia.....	243	187	19
98031	Female..	Bergen, Norway.....	244	182	18.5
1821	.....	Kinberg, Lapland.....	240	177	19
41010	.....	Petropaulski, Kamtschatka.....	220.5	165	15.5

52. CRYPTOGLAUX FUNEREA MAGNA (Buturlin).

One male, Verkhni Kolymsk, April 17, 1915.

This specimen, when compared with European birds, is more nearly hair brown on the back, in sharp contrast to the olive of the European series before me; it also seems to have more white spotting on the top of the head. The color of the back may be due to the freshness of the specimen, however. It measures as follows: Wing, 169; tail, 101.5; culmen, 14.

Family PICIDAE.

53. DRYOCOPUS MARTIUS REICHENOWI Kothe.

One male, 8 miles west of Verkhni Kolymsk, May 22, 1915; one female, 80 miles from mouth of Little Annuj River, November 23, 1914.

These are of the same deep black as a male specimen from Manchuria and a female from north China, but have smaller bills.¹ They measure as follows:

U.S.N.M. No.	Sex.	Locality.	Wing.	Tail.	Culmen.
			<i>mm.</i>	<i>mm.</i>	<i>mm.</i>
237397	Male....	8 miles west of Verkhni.....	253	168	57.5
237296	Female..	Little Annuj River.....	245	174	56

A winter resident in the Kolyma. The first one observed was in November, 100 versts [67 miles] from Nijni Kolymsk on the Lesser Annuj (collected by Axel Sändmark) in a larch next the river. In the winter I saw two skins brought in by Chorkches, one to Nijni Kolymsk, the other to Verkhni Kolymsk. The specimen taken 12 versts [8 miles] west of Verkhni Kolymsk had a nest 10 feet from the ground in the heart of the largest white birch I saw in the valley. The nest tree was in a swampy, willow-covered locality, near the

¹ See Proc. Biol. Soc. Wash., vol. 28, Sept. 21, 1915, p. 162.

shore of a large lake. The nest contained four white eggs. I watched for awhile, but did not observe the mate. This one was working at the nest and the ground at the foot of the birch was sprinkled with pickings from the tree. The form is shy.—C. A.

Only one egg from the set mentioned above by Mr. Amory is in his collection. It measures 34.3 by 25.3 mm.

54. *PICOIDES TRIDACTYLUS CRISSOLEUCUS* (Reichenbach).

One male 80 miles from mouth of Little Annuj River, November 18, 1914. It measures—wing, 120.5; tail, 82; culmen, 30. This is so distinct from *P. t. tridactylus* that I do not see the utility of making it a form of that species, unless it is known to intergrade.

Saw three of these woodpeckers on the Little Annuj in November. I did not see any but was told at Verkhni Kolymsk they were there throughout the year.—C. A.

Family HIRUNDINIDAE.

55. *HIRUNDO URBICA WHITELEYI* (Swinhoe).

Three males, Nijni Kolymsk, June 15, 16, and 17, 1915.

Family TURDIDAE.

56. *TURDUS MUSICUS* Linnaeus.

Two males, 7 miles north of Nijni Kolymsk, May 18 and 23, 1915; one female, Nijni Kolymsk, June 10, 1915.

These three birds when compared with a series from Europe are more nearly hair brown on the back, while in European birds it is bistre. There appears to be no difference in size.

57. *CYANOSYLVIA SUECICA ROBUSTA* (Buturlin).

One male, Nijni Kolymsk, June 27, 1915.

It measures as follows: Wing, 73; tail, 51; culmen, 13.

58. *OENANTHE OENANTHE OENANTHE* (Linnaeus).

One male, immature, Ajan Island, August 17, 1914; one male (?), immature, Cape Bolshaja Baranov, August 11, 1915.

Family SYLVIIDAE.

59. *PHYLLOSCOPUS TROCHILUS EVERSMANNI* (Bonaparte).

One male, Nijni Kolymsk, June 27, 1915; one male, 7 miles north of Nijni Kolymsk, June 10, 1915; and one female, Kolyma River, opposite Nijni Kolymsk, June 18, 1915.

The above specimens, along with the series reported upon by Thayer and Bangs,¹ kindly loaned me by the authorities of the Museum of Comparative Zoology, when compared with a series of

¹ Proc. New England Zool. Club, vol. 5, Apr. 9, 1914, p. 39.

Phylloscopus t. trochilus appear quite different. *P. t. evermanni* differs from *P. t. trochilus* in being gray on the back (between hair brown and drab) with only a very slight yellowish tinge, this latter color being confined mostly to the rump and wings, quite different from the buffy olive upper parts of the latter. *P. t. evermanni* is grayish white below with only a slight buffy tinge on the jugulum, in sharp contrast to the yellowish tinge, more or less pronounced on the under parts of *P. t. trochilus*, and the loreal streak is more sharply defined and more distinctly yellow in the latter. In size there is little or no difference, as the following will show:

	Wing.	Tail.	Culmen.
	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>
Six males of <i>P. t. evermanni</i>	70.9	53.3	9.4
Four males of <i>P. t. trochilus</i>	68	50	9.5
Four females of <i>P. t. evermanni</i>	65.5	48	9.2
Four females of <i>P. t. trochilus</i>	66.8	49	9.5

Mr. Amory took a nest and seven slightly incubated eggs on the Kolyma, directly opposite Nijni Kolymsk, June 18, 1915. The nest was in swamp and willows on one side of a "niggerhead," with water directly below the nest and a leaning dead willow stick directly above. The nest outwardly is composed of rather coarse grass with a few pieces of sphagnum moss, loosely woven; internally of finer grass and lined with white ptarmigan feathers. The outer covering extends up over the egg cavity, forming a roof. In fact, the nest has the appearance of two nests, the outer one composed of dark-colored coarse grass and the inner of finer yellowish grass. Outwardly the nest measures about $6\frac{1}{2}$ by 5 inches; the egg cavity which is rounded 2 inches. The inner nest is placed in the front of the mass that composes the outer nest.

The eggs are short, ovate in shape; white, rather evenly spotted with larger and smaller spots of vinaceous russet in two tints; the spots more numerous on the larger end. They measure as follows: 16.7 by 12.6, 16.4 by 12.5, 15.5 by 12.4, 16.4 by 12.5, 16.7 by 12.7, 16.5 by 12.6, 16.2 by 12.4 mm.

60. REGULOIDES SUPERCILIOSUS SUPERCILIOSUS (Gmelin).

One male, Nijni Kolymsk, June 10, 1915. It measures—wing, 58.5; tail, 40; culmen, 9.

Family LANIIDAE.

61. LANIUS EXCUBITOR MOLLIS Eversmann.

One immature, Nijni Kolymsk, September 8, 1914.

Family PARIDAE.

62. PENTHESTES CINCTUS KOLYMENSIS (Buturlin).

Two males and one unsexed, 80 miles from the mouth of Little Annuj River, November 13 and 14, 1914; one male, Verkhni Kolymsk, April 14, 1915; one male and one female, 67 miles west of Verkhni Kolymsk, May 12, 1915.

These birds appear to be paler than *Penthestes c. alascensis*, especially on the flanks.

These remain even in the lower Kolyma throughout the year.—C. A.

This series measures as follows:

U.S.N.M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Culmen.
237468	.....	80 miles from mouth of Little Annuj River	<i>mm.</i> Nov. 13	<i>mm.</i> 71	<i>mm.</i> 69.5	<i>mm.</i> 9.5
237469	Male.....	.....do.....	Nov. 14	73	71.5	9.5
237470	.....do.....	.....do.....	.....do.....	70	69.5	9.5
237471	.....do.....	Verkhni Kolymsk	Apr. 14	74	71	10
237472	.....do.....	33 miles west of Verkhni	May 12	72.5	67.5	9
237473	Female.....	.....do.....	.....do.....	67	68	9

Family MOTACILLIDAE.

63. MOTACILLA ALBA OCULARIS Swinhoe.

One male, 40 miles south of the mouth of the Kolyma River, July 6, 1915; one male, 7 miles north of Nijni Kolymsk, May 17, 1915.

64. BUDYTES FLAVUS PLEXUS Thayer and Bangs.¹

One immature, in white plumage, Koliutschin Bay, August 10, 1914; one male, 7 miles north of Nijni Kolymsk, June 2, 1915; two males and two females, Nijni Kolymsk, June 16, 17, and 27, 1915.

In the above series of adults three have the narrow white superciliary as given by Thayer and Bangs,² and two are without it. The latter, when compared with *B. f. borealis*, are duller in color, not nearly so bright on the back. In a series of nine (seven breeding birds) of *B. f. simillima* from Kamchatka, the white superciliary extends forward to the bill in every case, and it would appear that any specimen in which it occurs only posterior to the eye is aberrant. *B. f. simillima* seems to be brighter above with the gray of the top of the head more sharply defined against the back than in *B. f. plexus*. I regard the latter as a good race, though I am aware that my remarks do not agree with what Thayer and Bangs have written. Below I give the measurements of a series of males of *B. f. simillima* and *B. f. plexus*, which suggests the possession of a longer bill by the former.

¹ Proc. New England Zool. Club, vol. 5, 1914, p. 41.

² Idem, p. 42.

Budytes flavus simillima.

U.S.N.M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Culmen.
89148.....	Male....	Petropaulski, Kamchatka.....	July 11	<i>mm.</i> 79	<i>mm.</i> 67.5	<i>mm.</i> 13
89149.....	do.....	do.....	July 4	81	71.5	15
201498.....	do.....	do.....	June 18	79	66	14
201499.....	do.....	do.....	June 17	85	73.5	13
201497.....	do.....	do.....	June 19	83	70.5	13
201496.....	do.....	do.....	June 17	80	69	13.5
201500.....	do.....	do.....	do.....	80.5	70.5	13.5

Budytes flavus plexus.

237462.....	Male....	7 miles north of Nijni Kolymsk.....	June 2	82	72	12.5
237464.....	do.....	Nijni Kolymsk.....	June 17	79.5	68	13
237466.....	do.....	do.....	June 27	80	69.5	12.5

A nest with five nearly fresh eggs was taken at Nijni Kolmsk, June 16, 1915. It was placed in a tuft of grass, 10 feet inside the fringe of willows that lines the banks of the Kolyma. The nest is composed of rather coarse grass, lined with hair and one grayish-white feather. It is about $3\frac{1}{2}$ inches in diameter outwardly and the egg cavity, which is rather shallow, about $2\frac{1}{2}$ inches in diameter.

The eggs are olive buff in ground tint, profusely spotted rather evenly over the entire surface, with very minute spots of wood brown and some purplish shell markings. They measure as follows: 19.6 by 14.9, 20 by 14.8, 20.2 by 14.6, 19.5 by 14.4, 19.4 by 14.3 mm.

65. ANTHUS GUSTAVI Swinhoe.

One male, Nijni Kolymsk, June 17, 1915.

I have compared this specimen with a series from Bering and Copper Island; it appears to be more heavily streaked below, but does not seem to differ otherwise. It measures: Wing, 83; tail, 54; culmen, 13.

66. ANTHUS, species?

One immature, Emma Harbor, August 5, 1914.

This is a young bird not long from the nest; too young to be identified with any degree of certainty at present, except that it probably does not belong with the above species.

Family ALAUDIDAE.

67. OTOCORIS ALPESTRIS EUROA Thayer and Bangs.¹

Six males, 7 miles north of Nijni Kolymsk, May 14, 15, and 16, 1915. I can add nothing to the account of the describers. The above series measures as follows:

¹ Proc. New England Zool. Club, vol. 5, 1914, p. 43.

U.S.N.M. No.	Locality.	Date.	Wing.	Tail.	Culmen.
237400....	7 miles north of Nijni.....	May 14	<i>mm.</i> 111	<i>mm.</i> 69	<i>mm.</i> 12.
237403....	.....do.....	May 16	111	72	12.5
237404....	.....do.....	May 15	116.5	73	12.5
237402....	.....do.....	May 16	115	69.5	12.5
237401....	.....do.....	May 14	116	73.5	11.5
237399....	.....do.....	.....do.....	113.5	72.5	12

Family FRINGILLIDAE.

68. ACANTHIS HORNEMANNI EXILIPES (Coues).

Two males and one female, Nijni Kolymsk, June 10, 16, 25, 1915; one male and one female, 7 miles north of Nijni Kolymsk, May 21, 1915.

One of the males taken at Nijni Kolymsk (No. 237425, June 25) is very pale above, the centers of the feathers of the back and wings being light drab, edged with dirty white; tail smoke gray, edged with white. In fact, it is approaching albinism.

Very common in summer and autumn. Did not observe them around Nijni after the end of October, but was told at Verkhni they remain in the upper Kolyma Valley all winter.—C. A.

A nest and four eggs with incubation advanced about five days was taken from a willow about 2½ feet from the ground at Nijni Kolymsk, July 5, 1915. The nest is composed of cotton wool, rootlets, grass, and small sticks felted together and lined with cotton wool and feathers. The outside diameter of the nest is about 3½ inches, that of the egg cavity is about 1¾ inches, and the depth of the latter about 1¾ inches.

The eggs are etain blue with some light vinaceous-drab markings and a few spots and scrawls of taupe brown arranged principally around the larger end. They measure as follows: 16 by 12, 16.2 by 12.4, 16.4 by 11.9, 16.4 by 11.7 mm.

69. PLECTROPHENAX NIVALIS NIVALIS (Linnaeus).

Three males and five females, 7 miles north of Nijni Kolymsk, May 12, 13, and 14, 1915; one immature male and one female, Emma Harbor, July 22 and August 5, 1914.

These do not seem to differ from North American birds in size or color.

70. CALCARIUS LAPPONICUS ALASCENSIS Ridgway.

One adult and one young male, and four adult females, Emma Harbor, July 22 and 28 and August 8, 1914; one young, Koliutschin Bay, August 10, 1914.

These specimens are very much worn but seem to agree better with *C. l. alascensis* than with *C. l. coloratus*, as has been already remarked by Thayer and Bangs.¹

¹ Proc. New England Zool. Club, vol. 5, 1914, p. 46.

Locality.	Wing.	Tail.	Culmen.
	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>
Three males from mainland Siberia.....	92.7	60.2	11.8
Ten males, <i>C. l. coloratus</i>	97.3	62.5	12.2
Twenty-two, <i>C. l. alascensis</i> ¹	95.7	63.2	11.6
Four females from mainland Siberia.....	87.2	59	11
Six females, <i>C. l. coloratus</i>	92.1	58.9	11.7
Twenty-four, <i>C. l. alascensis</i> ¹	86.1	58.4	10.9

¹ Ridgway, Bull. U. S. Nat. Mus. No. 50, Pt. i, 1901, p. 158.

The commonest perching bird at Emma Harbor.—C. A.

71. *EMBERIZA PALLASI* (Cabanis).

One male, 7 miles north of Nijni Kolymsk, June 9, 1915.

It measures—wing, 71.5; tail, 59; culmen, 9.5.

72. *EMBERIZA PUSILLA* Pallas.

Two males, Nijni Kolymsk, June 10 and 27, 1915.

These measures as follows: Wing, 73–69.5; tail, 57–54; culmen, 9.5.

Family CORVIDAE.

73. *CORVUS CORAX KAMTSCHATICUS* Dybowski.

One ("female" ?), Verkhni Kolymsk, April 20, 1915.

It measures—wing, 415; tail, 238.5; culmen, 69. Counting from the outside, the third and fourth primaries are longest, the third longer than the fifth.

Compared with *C. c. behringianus*, *C. c. kamtschaticus* appears to be of a deeper black and the gloss of a different shade of purple (more steely) but I attribute these differences to season; *C. c. behringianus* has a heavier bill, however. A male of *C. c. ussuriensis* from I-mien-po, Manchuria, October 14, 1914, before me, agrees very well with *C. c. kamtschaticus* in color, but has a shorter and weaker bill. It measures—wing, 410; tail, 257; culmen, 62.5.

As Stresemann¹ has shown, *Corvus corax sibiricus* Taczanowski, 1891, can not be used on account of *Corvus sibiricus* Boddaert, 1783, and Gmelin, 1788. I therefore follow Buturlin² in using *C. c. kamtschaticus* Dybowski for the eastern Siberian form.

We saw ravens along the coast of the Chorchee Peninsula. They are found throughout the Kolyma Valley, especially in the upper part.—C. A.

74. *CORVUS CORONE ORIENTALIS* Eversmann.

One female, Nijni Kolymsk, October 1, 1914.

This specimen agrees fairly well with a female bird from Tientsin, China, February 26, except it has a slightly longer bill. From Kamtschatcan specimens it differs in the same way that the raven

¹ Orn. Monatsb., vol. 21, 1913, p. 9.

² Messenger Ornith., vol. 6, 1915, pp. 107, 114.

from Bering Island and the Kolyma differ in that the back is more steely blue not so purplish, and in my opinion, Dr. L. Stejneger¹ was justified in assigning the crow of this species from Kamtschatka to a different form. The measurements of the females given by Doctor Stejneger¹ with the two birds mentioned above are as follows:

U.S.N.M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Culmen.
97762	Female..	Petropaulski.....	Sept. 20	<i>mm.</i> 330	<i>mm.</i> 198	<i>mm.</i> 53
97761	...do....	.....do.....	Oct. 10	324	195	52
236939	...do....	Tientsin.....	Feb. 26	315	183.5	45
237414	...do....	Kolyma River.....	Oct. 1	320	187	49

75. *NUCIFRAGA CARYOCATACTES MACRORHYNCHOS* Brehm.

One male, two females, and two unsexed, 80 miles from the mouth of the Little Annuj River, November 10, 11, 14, and 20, 1914; one male, 53 miles west, May 10, 1915; and one male, 67 miles west of Verkhni Kolymsk, May 21, 1915.

The majority of the Kolyma birds when compared with three males and one female from Korea look quite different; they are more nearly hair brown on the back, which is bistre in the Korean series. A male and female from Japan are rather odd in that the female (July 2) resembles the Kolyma birds in color, while the male (December 7) is like the Korean birds. It may be that the striking difference in color between Korean and Kolyma birds is due to the freshness of the specimens of the latter. This is the more probable as two of the Kolyma specimens resemble the Korean birds.

U.S.N.M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Culmen
237423	Male....	67 miles west of Verkhni Kolymsk.....	May 10	<i>mm.</i> 187	<i>mm.</i> 124.5	<i>mm.</i> 47
237424	...do....	53 miles west of Verkhni Kolymsk.....	May 21	177.5	117	44.5
237420	...do....	80 miles from mouth Little Annuj River.	Nov. 14	183.5	118	44
237422	Female..	.....do.....	Nov. 20	184	125	39.5
237421	...do....	.....do.....	...do....	177	117.5	40

Observed many on the Little Annuj in November but not around Nijni. In April and May observed them in the foothills of the Tomus Chaja Mountains. Was told at Verkhni they were to be found in this region regularly throughout the year; that is, near the mountains.—C. A.

76. *PERISOREUS INFAUSTUS YAKUTENSIS* Buturlin.²

Four males and one female, Verkhni, Kolymsk, April 14 and 22, 1915; one male, Little Annuj River, September 6, 1914; one male, 80 miles from mouth of Little Annuj River, November 5, 1914.

¹ Bull. U. S. Nat. Mus., No. 29, 1885, pp. 239-241.

² Messenger Ornith., 1916, pp. 39, 43.

This series when compared with European specimens is so very different that it seems very doubtful whether it should be only accorded subspecific rank. They are clear slaty gray on the back without the brownish wash seen in *P. i. infaustus*; below they are lighter gray with a slight buffy wash, quite different from the tawny of *P. i. infaustus*. This series measures as follows:

U.S.N.M. No.	Sex.	Locality.	Date.	Wing.	Tail.	Culmen.
237410	Male....	Verkhni Kolymsk.....	Apr. 22	<i>mm.</i> 147.5	<i>mm.</i> 130	<i>mm.</i> 22.5
237411	...do....	...do.....	...do....	148	137.5	23.5
237409	...do....	...do.....	...do....	149.5	135	.....
237408	...do....	...do.....	Apr. 14	146.5	137.5	22
237407	...do....	80 miles from mouth Little Annuj River.	Nov. 5	149	138	23.5
237406	...do....	Little Annuj River.....	Sept. 6	146	137.5	.....
237412	Female..	Verkhni Kolymsk.....	Apr. 22	148.5	134	22.5

This bird is common throughout the Kolyma Valley. Winter resident.—C. A.